



File Code: 1950-1

Date: August 6, 2009

**Dear Interested Party;**

The Livingston Ranger District of the Gallatin National Forest is initiating an Environmental Analysis for West Paradise Fuels Project, which would reintroduce fire at a landscape level along the east flank of the Gallatin Mountain Range to reduce current fuel loadings and break up vertical and horizontal fuel arrangement. The east side of the Gallatin Mountain Range is no stranger to large fire activity. The prevailing wind patterns, during peak fire seasons, within the project area tend to be southwesterly. Coincidentally, the major topographical features also align in a southwesterly fashion. Such an alignment of both wind and topography sets the stage for a potential wildland fire to severely burn entire drainages. Over the last ten years, two large stand replacing fires have occurred along the west side of the Paradise Valley, the 24,000 acres Fridley Fire (2001) and the 14,000 acre Big Creek Fire (2006).

Targeted treatments would include those areas that historically experienced either low or moderate intensity, high frequency fire disturbances. Low intensity areas to be treated exist on multiple aspects throughout the project area. Moist habitat types within the project area are typically located on north and east facing aspects, while the drier habitat types exist on south and west facing aspects. All of these habitats were historically intermixed with grass and sage meadows, with the moist sites containing smaller meadows and a denser conifer component. Fire historically acted as a thinning mechanism to maintain the integrity of grass and sage meadow steppes, while also maintaining and removing ladder fuels in timbered stands, leaving them in an open park-like condition. Due to numerous years of fire exclusion, these areas are currently more susceptible to large stand replacing wildfires. Proposed treatments would not be focused on forested types that historically burned at a high severity, low frequency. Typically, those forested types are located at higher elevations and are not considered to be outside of their historic range of variability for fire return intervals.

Proposed vegetation treatments would include slashing, and understory thinning in preparation for the use of prescribed fire in the roaded portions of the project area. Within the roaded portions of the project area, fire engines will be used to facilitate control of prescribed fire units on existing roads. There would be no mechanical treatments associated with treatment areas located within the Wilderness Study Area (WSA). Natural barriers and minimum impact suppression tactics (MIST), similar to the suppression tactics in wilderness areas, would be utilized to contain these prescribed burn units. There would be no commercial timber harvest, no road building, and no off road ground-based heavy equipment (helicopters would be used for prescribed burning operations) utilized in the implementation of this project. The only possible exception could be within the roaded area, in the vicinity of the Big Creek Guard Station (outside the WSA), where there some mechanical thinning opportunities could result in a small amount of commercial harvest.



## Public Involvement

The first step in an environmental analysis is to determine what needs to be analyzed. To do this, the National Environmental Policy Act (NEPA) outlines a process termed "scoping" (refer to 40 CFR 1501.7). The Council on Environmental Quality (CEQ) defines scoping as "an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a Proposed Action" (40 CFR 1501.7).

First, comments are obtained from interested and affected parties, both within and outside the agency, to develop potential issues that must be considered. Second, the "potential issues" are reviewed by the interdisciplinary team to determine: (a) the key issues to be analyzed in depth and (b) issues that are not significant or that have been covered by prior environmental review and, therefore, should be eliminated from detailed study. After scoping is complete, documentation of the review of comments and potential issues will be compiled and will be located in the project file.

Your comments relative to the purpose and need, proposed action, project scope and possible impacts are critical, e.g., what do you like or dislike about what is being proposed? What are some possible improvements/changes to make the proposal better? What are some of your concerns or opportunities relative to the project area and proposal?

For the West Paradise Fuels Project, the scoping process is only one aspect of our public involvement process. This letter is being mailed to individuals or groups who have indicated an interest in similar projects on the Gallatin National Forest, or live in the vicinity of the project area. The goal of public involvement is to collaborate with interested individuals, agencies, and groups. We plan on organizing public field trips and meetings, but would like to know what types of public involvement you think is needed to foster a collaborative planning process.

This project is part of the Gallatin Forest's ongoing emphasis on implementing projects that increase firefighter and public safety in the event of a severe wildfire and is part of a broader program to implement the *National Fire Plan* (USDA Forest Service, 2000).

## Project Area

The 111,000 acre analysis area for the project is located along the west side of the Paradise Valley, from Dry Creek (north) to Rock Creek (south) on the east flank of the Gallatin mountain range just west of the Yellowstone River (see attached map). Elevations range from 5600' to 8500' and topographic features are typical of mountainous regions, with rolling hills to steep terrain with saddles and ridges. A predominance of Douglas fir (*Pseudotsuga menziesii*) and lodgepole pine (*Pinus contorta*) occur throughout the area; to a lesser degree a mix of Englemann spruce (*Picea engelmannii*), subalpine fir (*Abies lasiocarpa*), aspen (*Populus tremuloides*), big sagebrush (*Artemisia tridentata*), other shrub-steppe, meadows, and riparian complexes currently exist.

Forest habitat types in the project area are categorized into six fire habitat type groups based on Fischer and Clayton (1983). The dominant fire habitat types consist of: Fire Group 0 (scree, rock, meadow, grass ridges); Fire Group 4 (warm, dry Douglas fir habitats); Fire Group 6 (moist,

Douglas-fir habitats), Fire Group 7 (cool habitats dominated with lodgepole pine), Fire Group 8 (dry, lower subalpine habitats), and Fire Group 9 (moist, lower subalpine habitats).

## **Background**

The recently completed Park County Community Wildfire Protection Plan (2006) identifies the eastern edge of the project area as Wildland Urban Interface. There is a demonstrated need to reduce fuel loadings in this portion of the project area in the near future, to increase public and firefighter safety, prior to another large stand replacing wildland fire occurring in the area. A landscape scale treatment approach instead of traditional small-scale treatments is the most effective way to improve firefighter and public safety, as well as improve ecological integrity.

Frequent, low intensity natural burning mechanisms historically maintained grasslands, shrublands, and open stands of Douglas fir. These low intensity fires generally burned only the surface vegetation, while effectively removing smaller Douglas fir seedlings before they could become established. Fire frequency in these areas ranged from 5 to 20 years. In the moderate intensity disturbance areas, fire also played an important role as a thinning mechanism as well as a stand replacement agent. Low to moderate severity fires effectively converted pole sized and larger stands to a fairly open mosaic condition. Moderate burning intensities are best categorized as surface fires with occasional single and group tree torching in dense, fuel heavy stand structures. Although not as frequent as the low intensity areas, the moderate intensity areas had a mean fire return interval of approximately 42 years (Arno and Gruell 1983).

Much of the analysis area is within the Hyalite-Porcupine-Buffalo Horn (HPBH) Wilderness Study Area (See attached map). The Wilderness Study Area (WSA) was designated as part of the Montana Wilderness Study Act of 1977, (P.L. 95-150). This law directs that the WSA is to be administered so as to maintain its wilderness characteristics as they existed in 1977, and to maintain the potential for the area to be designated as wilderness at some future date, until Congress determines otherwise. Wilderness characteristics include maintaining natural integrity, apparent naturalness, opportunities for primitive recreational experiences, and opportunities for solitude (See Appendix A). When making project level decisions within the WSA, one must consider the effect of the decision on these wilderness characteristics as they existed in 1977. Uses and activities that are detrimental to or do not maintain or enhance the wilderness character and potential for the area's inclusion into the Wilderness Preservation System should not be allowed. Because this is the case, it is prudent to consider activities which can occur within designated Wilderness. Regarding fire management, two objectives exist to consider managing fire within wilderness. First, to allow lightning caused fires to play, as nearly as possible, their ecological role and secondly, to reduce to an acceptable level, the risks and consequences of wildfire within wilderness or escaping from wilderness.

Currently, the Forest does not have the option to manage wildfire within the WSA and full suppression is the required response for all wildfires. Full suppression will remain the Forest direction in the WSA until such time that the Gallatin Forest Plan is modified to become more aligned with current national fire policies, which allow natural fires to play a larger role in shaping the ecosystem. A Forest Plan Amendment that allows for prescribed natural fire, under the appropriate conditions, within the WSA is currently being completed. After the decision is released and in effect, then future wildfires in the WSA would be able to be evaluated for various management opportunities and not necessarily require full suppression.

Public access, although limited to a few roads or trails, provides a variety of recreational pursuits. Allowable uses of roads and trails in the WSA were designated in the 2006 Gallatin Travel Plan. Many other activities have occurred within the project area. Past timber harvest has occurred, including on areas within portions of the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area (WSA) prior to its designation. Use of chainsaws in the WSA is not unprecedented, but has been primarily associated with wildfire suppression and/or restoration. Livestock grazing occurs on permitted allotments. Interspersed private lands have had a combination of timber harvest, livestock grazing, other ranching operations, and/or land development activities. Burned Area Emergency Rehabilitation (BAER) and other post-fire restoration projects were implemented in the Fridley and Big Creek wildfire areas both within and outside of the WSA.

The Paradise Valley Vegetation Treatment Decision Notice of 2003 and the Big Creek Administrative Site Vegetation Treatment of 2005 analyzed vegetation treatments in lower Big Creek outside of the WSA, much of which has been implemented. Treatment methods similar to those being proposed with the West Paradise Fuels Project outside of the WSA were utilized in preparation for the Big Creek Prescribed Burn (Unit 2) that was successfully executed in September 2008 (See attached map). Unit 2 is adjacent to a portion of this proposed project and contains similar timber types. Implementing treatments in the adjacent WSA would augment the success of these past treatments.

With changing climatic and vegetative conditions, fire starts in the Paradise Valley tend to burn with greater intensity resulting in less effective, less safe, and more costly control efforts. Over the past decade fire seasons in southwest Montana have been more severe and longer in duration than they had traditionally. Prior to 2000, fire seasons in the Northern Rockies generally started in late June early July and ended in mid to late September. Beginning in 2000, fire seasons have generally started in early June and extended into November with the most active burning months being August and September.

## Treatment Areas

The majority of the proposed treatment areas would be concentrated in the unburned drainages within the project area. As stated above, those drainages consist of areas that historically saw relatively frequent, but low intensity fires that acted as a thinning mechanism to maintain species diversity as well as multiple age classes. However, under the current fire management policy, wildland fire has been fully suppressed resulting in stands that have missed at least two natural fire cycles. Missed fire cycles have lead to uncharacteristically high fuel loadings and continuous even-age fuels in areas that were historically open savannahs with dispersed grass and sage structures. Due to fire exclusion, those areas are becoming increasingly encroached by surrounding conifers and juniper, resulting in a reduction of vegetative community diversity. There are three primary types of vegetation conditions targeted for treatment in the project area.

They are:

- **Warm, dry Douglas-fir** forested areas are the indicated climax species at moderate elevations (to about 7500') and generally occur on southerly facing slopes with diverse under-stories that produce a variety of grasses and shrubs. These forests evolved with frequent, low intensity fire that perpetuated an open canopy of large diameter, widely spaced trees. These stands have been disrupted by fire suppression and now display ladder fuels and increases in tree numbers due to excessive levels of seedling survival. Understory vegetation has been reduced due to needle duff and litter accumulation.
- **Moist, Douglas-fir** forested areas evolved with moderate frequency (40-50 year) fire intervals. The types of fire that occurred historically were variable depending on site conditions, stand history, and successional stages, although most were low intensity ground and/or mixed severity fire (fire acted as a thinning agent). Fuel loadings average 15 tons/acre and greater.
- **Grasslands and shrub-lands** evolved with high frequency, low intensity fires. These diverse areas of large numbers of species range from solid stands of grasses, to a mixture of grass and shrubs, to predominately shrub. Grasslands have been altered by the invasion of shrubs and conifers and historic shrub-lands have been invaded by conifers. Without regular fire ignitions to maintain their structure and composition, conifer trees colonization has reduced their diversity of mosaic patch size and overall occupancy on the landscape.

## Purpose and Need

The West Paradise Prescribed Burn Project has two primary purposes:

*(1) To manage a fire-prone landscape to improve both public and firefighter safety by reducing natural fuel levels in the Wildland Urban Interface (WUI) as identified in the Park County Community Wildfire Protection Plan (2006)*

- Creation of strategically placed treatments that effectively reduce potentially severe wildfire behavior entering into the WUI.

*(2) To improve the potential, in the future, for naturally ignited wildfires to play, as nearly as possible, their ecological role in the Hyalite-Porcupine-Buffalo Horn (HPBH) Wilderness Study Area by breaking up fuel concentrations in the Big Creek drainage.*

- Creation of fuel conditions that would allow for future wildfires within the HPBH Wilderness Study Area (WSA) to be managed to meet resource objectives under prescribed conditions, instead of full suppression as is currently required. Also to reduce to an acceptable level, the risks and consequences of wildfire within the HPBH or escaping from the HPBH

## Proposed Action

The proposed action for the project is outlined below:

- Approximately 9,100 acres would be treated with the proposed action. The majority of the treatment acres would be realized through the application of prescriptive burning techniques within the targeted habitat types. These habitat types vary in location, but are generally adjacent to shared boundaries between National Forest System Lands and private property.
- Prescribed burning would be completed under a specific set of weather parameters that allow for a post-burn mosaic of residual vegetation. It is expected that certain areas would burn more completely, while others remain unburned. A burn prescription would be generated by analyzing weather patterns and modeling fire behavior based on existing fuel conditions. The burn prescription would take into account flame lengths and fire intensities, which under a given weather prescription, would allow for the desired levels of conifer and vegetative mortality to meet the purpose and need of the project. The prescription would be written into the prescribed fire burn plan for the unit or units. Once developed, the burn plan is a dynamic document that requires yearly validation and District Ranger approval prior to implementation.

- No pre-burn preparation would occur in the WSA. Pre-burn preparation would, however, be utilized outside of the WSA along existing infrastructure and/or along the shared ownership boundaries between private and National Forest System lands. Collaboration with adjacent private landowners would be essential.
- Without pre-burn preparation in the WSA, treatment areas would require tight prescriptive conditions and likely require multiple entries to complete the larger treatment areas. Natural barriers and areas with lighter fuels would be utilized for containment of each unit.

Descriptions of various treatments associated with the proposed action are outlined below:

**Cutting (slashing/lop and scatter) of small diameter trees outside of the WSA** – Small diameter trees, less than 6 inches in diameter, that are either encroaching on grassland/sagebrush meadows or as part of a second growth forest understory would be slashed and the slash lopped and scattered to a height less than 18 inches. Slash would be removed from beneath the drip line of existing crowns of leave trees.

**Cutting (slashing) of conifer trees in aspen stands outside of the WSA** - Conifer trees would be cut and removed from the immediate aspen stand and for a distance of 100' surrounding it. Where cut trees are needed to provide a barrier adjacent to the aspen stand to deter ungulate browsing on aspen regeneration, trees may be left to deteriorate and would not be consumed in a prescribed fire. In other aspen stands, fire may be used to consume conifer slash and stimulate aspen regeneration. Very large conifer trees would be girdled and left standing as snags. Fencing individual stands, at least temporarily, may be necessary to protect regeneration from browsing.

**Limbing lower branches of large diameter trees outside of the WSA** - In some areas, limbing lower branches of larger diameter trees (e.g., those capable of surviving an underburn treatment) may be needed to reduce the chance of fire reaching and/or climbing up into the tree canopy stressing or killing the tree.

**Prescribed burning** – Prescribed fire would be used to burn through areas of predominately grass or shrub lands and under mature stands of conifers after pre-treatment. (Pre-treatment would not be allowed in the WSA). Those ignitions would be designed to control flame heights, as well as the flaming front of the prescribed fire so that grass and shrubs, ground surface fuel, and/or smaller trees are removed. Older mature trees within Douglas fir forested types would generally be left intact, although some mixed-intensity burning is anticipated. Mixed-intensity burning is a combination of underburning and the torching of small isolated pockets of conifers, which creates a mosaic of burned and unburned areas. All proposed prescribed burning actions would occur during the spring, fall, or winter, depending on fuel moisture and burning window parameters needed to meet stated objectives. Ignitions would be accomplished primarily by ground-based fire crew personnel using drip torches, and/or through aerial ignition with a helicopter. Some amount of prescribed fire may be allowed to burn with a mosaic pattern in riparian areas, where conditions are appropriate.

## Proposed Mitigation

Preliminary mitigation to protect various resources was identified by the interdisciplinary team of resource specialists and is listed below. Additional mitigation will likely be identified from public comments:

- 1) No new roads or ATV trails would be created. Where ATVs cannot be used, stock or helicopters may be utilized for transporting crew personnel and equipment. Vehicle use off designated routes would be pre-approved through a travel variance on a case-by-case basis. Motorized vehicles would not be allowed in the WSA.
- 2) Timing of prescribed fire activities would be coordinated to minimize effects to public users (permittees, hunters, outfitters, hikers, mountain bikers).
- 3) Prescribed broadcast burns and pile burns would maintain a minimum of 50 feet no burn buffer from perennial streams (except if stream specific treatments are prescribed outside of the WSA).
- 4) Understory and pile burns acres per day may be constrained by acres and piles/day to keep smoke emissions within the National Air Quality Standard (NAAQS) for particulate matter.
- 5) Minimum ambient distances will be established for each unit depending on the distances to permanent residences. Within the minimum ambient distances, the public would be warned about the potential for high smoke concentrations.
- 6) Livestock grazing may be restricted within a fire treated pasture for a minimum of one growing season (prior to and after burning). The burned areas may need to be rested or deferred from grazing until after seed maturity and seed shatter of native herbaceous plant species, depending on annual climatic conditions and regrowth. This deferment and/or rest would allow for better seeding and re-establishment of native plant species.
- 7) Existing range improvements would be protected.
- 8) To insure the protection of historical, cultural resource sites, and/or designated sensitive plant populations, prescribed treatments would be reviewed by an archeologist and plant surveyor and necessary adjustments made prior to implementation.
- 9) Patches of sagebrush, where no conifer colonization occurs, would be retained as seed sources for adjacent burned areas. Prescribed burning would not be applied to those areas in order to retain productive sagebrush.
- 10) Outside of the WSA, aspen stands determined to benefit from prescribed burning treatments, may be fenced or have conifers felled in them, in order to provide protection against big game browsing.
- 11) The project area will be surveyed by the district wildlife biologist for goshawks prior to any activities. If an active nest is located, the project boundary would be adjusted to avoid the nest area. A buffer of a minimum of 40 acres around the nest area would be established. Restrictions would go into effect, which require minimal human presence during the nesting season (March 1 through August 15, yearly). Burning would be restricted to the fall season, outside of the active nesting season.
- 12) Motorized equipment and off road vehicles must be washed before entering the project area to minimize the spread of noxious weeds.



## Potential Resource Issues

Resources that could potentially be negatively affected by the proposal were identified by the interdisciplinary team. Consideration of public comments received during project scoping and further development of the proposed action and alternatives will help the team to determine which of these issues may be significant, and identify whether there are other issues that have not yet been identified.

- 1) Effects to the Wilderness Study Area
- 2) Public & Firefighter Safety
- 3) Air Quality (Smoke)
- 4) Visual Quality
- 5) Noxious Weeds

## Applicable Forest Plan Direction

Forest Plan direction applicable at the project level includes:

**Wilderness Study Area (II-16.3):** Until Congress determines otherwise, the HPBH WSA (PL 95-150) will be managed, subject to existing rights and uses, to maintain its existing wilderness character and potential for inclusion in the National Wilderness Preservation System.

**Vegetation Diversity (II-19.1):** Forest lands and other vegetative communities such as grassland, aspen willow, sagebrush and whitebark pine will be managed by prescribed fire and other methods to produce and maintain the desired vegetative condition.

**Fire (II-28.5):** Prescribed fire (planned or unplanned ignitions) may be utilized to support management area goals.

### **Forest Plan Management Areas (III-17 through III-53):**

Management areas being considered for potential treatment within the West Paradise project area include:

**MA 8** lands are suitable for timber management and this use is emphasized although other resource uses may be allowed if compatible with timber goals. However, prescribed fire may be used to meet management area goals. Wildfire suppression response is control. (FP, III-24-26)

**MA 10** contains open grasslands which provide forage for livestock interspersed with suitable timber lands. Healthy stands of timber are to be maintained and range management is to be improved. Prescribed fire may be used to meet management area goals. Wildfire suppression response is control although contain and confine responses may be used before or after the fire season. (FP, III-30 to 32)

**MA 11** consists of forested big game habitat where vegetation management is to be based on vegetative characteristics needed for featured wildlife species. It also includes productive forest lands that are available for timber harvest. Prescribed fire may be used to meet management area goals. Wildfire suppression response is control although contain and confine responses may be used before or after the fire season. (FP, III-33 to 36)

**MA 12** provides goals and standards to maintain and improve the vegetative condition to provide habitat for a diversity of wildlife species and a variety of dispersed recreation opportunities. Livestock grazing is also provided as long as the use is consistent with wildlife habitat management goals. Prescribed burning can be used to meet management area goals. Wildfire suppression response is control, contain, or confine. (FP, III-37 to 39)

**MA 17** is similar to MA 16. It has areas are grasslands or nonproductive forest lands on slopes less than 40 percent that are suitable for livestock grazing and contain important big game habitat. Vegetative conditions and forage production are to be maintained or improved for wildlife and livestock use. Prescribed fire may be used to meet management area goals. Wildfire suppression response is control, contain, or confine. (FP, III-52 to 53)

## **Forest Service Manual Direction Pertaining to WSA**

### ***Forest Service Manual Directive 2329 – Management of Wilderness Study Areas (WSA)***

Manage Montana Wilderness Study Areas (MWSA) to maintain wilderness character as it existed at time of designation (1977) and potential for inclusion of the area in the National Wilderness Preservation System (NWPS) (See Appendix A).

## **In Closing**

Your comments will be used in our environmental analysis to help:

- 1) Refine the purpose and need.
- 2) Determine the scope of the issues to be addressed
- 3) Determine which issues are significant relating to the proposed action
- 4) Assist in further development of the proposed action and alternatives
- 5) Identify opportunities
- 6) Aid in development of a public involvement plan

I am asking you to review this proposal and submit any comments or concerns you may have regarding this project. Please submit your written comments to Barbara Ping, East Zone ID Team Leader, Bozeman Ranger District, 3710 Fallon Street, Suite C, Bozeman, MT 59715. You can also email comments to [bpingt@fs.fed.us](mailto:bpingt@fs.fed.us). **Comments should be submitted by August 5, 2009 to be considered.**

For more information, please contact myself (406)-932-5155 or Barbara Ping, ID Team Leader (406)-522-2558.

Thank you for your interest and participation.

Sincerely,

*/s/ Bill Avey*  
BILL AVEY  
District Ranger

**Attachment: Appendix A, Vicinity and Treatment Area Maps, and Comment Sheet**

## **Appendix A**

### **Applicable Forest Service Manual Directives**

#### ***2329 – Management of Wilderness Study Areas***

1. Manage Montana Wilderness Study Areas (MWSA) to maintain wilderness character as it existed at time of designation (1977) and potential for inclusion of the area in the National Wilderness Preservation System (NWPS).

- a. When making project level decisions (for example, trail maintenance, relocation, improvement, construction, reconstruction, permitted uses, and closures), the line officer must consider the effect of the decision on the wilderness character as it existed in 1977 (see Exhibit 01 for definition of wilderness characteristics).
  - b. If wilderness characteristics have been degraded, restore the area to 1977 conditions. That is, if a trail was single track and has evolved into two-track, close the trail to two-track use and restore it to single track use, or allow natural restoration where effective. If conflicting uses are occurring, consider separating the uses geographically through an appropriate planning process. That is, identify areas for snowmobiling and areas for cross-country skiing and snowshoeing.
  - c. Trails should not be upgraded to a more-developed standard than existed in 1977.
  - d. Pursuant to 36 CFR 212.52 (2), the line officer shall institute closure of a trail in a Wilderness Study Area if use is causing or will cause considerable adverse effects on resource values referred to in Sec. 212.52 (2), until the effects are mitigated or eliminated.
2. Management of existing uses and facilities.
- a. At the time of designation of the areas, uses that existed in 1977 can be allowed to continue subject to 36 CFR 212.57. If increases in amount of use occur, the line officer should consider how the increases affect wilderness character and the area's potential for inclusion in the NWPS. If negative effects are noted, implement actions as described in 1.b. of this policy.
  - b. Facilities that existed in 1977 can continue to exist, be maintained, or reconstructed. This may include administrative structures or structures in support of permitted activities such as grazing allotments or outfitter and guide permits.
3. New uses, activities, and facilities.
- a. When evaluating new uses, resource management activities, or administrative facilities in the WSA such as prescribed fire, tree planting, trail construction, or

- special use permits, document how the use, activity or facility maintains the wilderness character and the potential for the area's inclusion in the NWPS.
- b. Uses, activities, or facilities that are detrimental to or do not maintain or enhance the wilderness character and potential for the area's inclusion in the NWPS will not be allowed.
  - c. All terrain vehicles (ATVs) and motor bikes may be allowed on roads that had jeep use in 1977 (two tracks).
  - d. Mountain bikes may be allowed on trails that had established motor-bike use in 1977, or on non-motorized trails as long as the aggregate amount of mountain bike and motorcycle use maintains the wilderness character of the WSA as it existed in 1977 and the area's potential for inclusion in the National Wilderness Preservation System.
- 4. Monitoring. Forests and Grasslands shall monitor WSAs to ensure that the wilderness character is not diminished beyond what existed in 1977 and to ensure that the areas are maintained for potential inclusion in the NWPS. Monitoring WSAs will be covered through the encompassing monitoring program for the Land and Resource Management Plan (LRMP).
  - 5. Administrative Use of Motorized Equipment. Motorized equipment; chainsaws, motorized rock drills, wheelbarrows, mini trail excavators and other similar trail machines are allowed for project work. For fire suppression, utilize MIST tactics to minimize impacts to resources where possible without jeopardizing firefighter safety. Dozers may be allowed for fire suppression. Special approval for use of motorized equipment and mechanical transport resides with the designated line officer. As near as possible, all firelines and dozer firelines must be rehabilitated to their condition prior to the fire.
  - 6. Public Notification of Wilderness Study Areas. Post WSA trailheads with posters and/or maps indicating the WSA boundary, description of agency legal responsibilities and any travel management restrictions. Include the WSA boundary on forest visitor maps.

### **Definitions of Wilderness Characteristics**

**Natural Integrity**—The extent to which long-term ecological processes are intact and functioning. Impacts to natural integrity are measured by the presence and magnitude of human-induced change to an area. Such impacts include physical developments (for example, roads, trails, utility rights-of-way, fences, lookouts, cabins, recreation developments, livestock grazing, mineral developments, wildlife/fisheries management activities, vegetative manipulation, and fire-suppression activities).

**Apparent Naturalness**—The environment looks natural to most people using the area. It is a measure of importance of visitors' perceptions of human impacts to the area. Even though some long-term ecological processes of an area may have been interrupted, generally the area landscape appears to be affected by forces of nature. If the landscape has been modified by human activity, the evidence is not obvious to the casual observer, or it is disappearing due to natural processes.

**Opportunities for Primitive Recreation Experience**—The area provides opportunities for isolation from evidence of man, a vastness of scale, feeling a part of the natural environment, having a high degree of challenge and risk, and using outdoor skills characterized by meeting nature on its own terms without comfort or convenience of facilities.

**Opportunities for Solitude**—Isolation from sights, sounds, presence of others and developments of man, focusing on features of the area that offer users outstanding opportunities for solitude; size of the area, presence of vegetation and topographic screening rather than focusing on amount of use.

**West Paradise Fuels Project (page 1 of 2)**  
**Comment Sheet on Proposal – August 5, 2009**

Your name:\_\_\_\_\_

Your address:\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**Do you have comments that can help refine the purpose and need?**

**Are there additional issues, concerns and/or opportunities specific to the proposal that we have not considered?**

**West Paradise Fuels Project (page 2 of 2)**

**Comment Sheet on Proposals – Please Return by August 5, 2009**

**Are there specific public involvement activities you think should be included in our public involvement plan?**

**Other comments regarding the Proposal.**

**Would you like to receive further correspondence for this project?**

**YES** \_\_\_\_

**NO** \_\_\_\_